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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,825	12/27/2001	Sang-Ho Choi	P67478US0	9855

7590 07/15/2004

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EXAMINER

QUINONES, ISMAEL C

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/026,825	<b>Applicant(s)</b> CHOI ET AL.	
	<b>Examiner</b> Ismael Quiñones	<b>Art Unit</b> 2686	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on December 27, 2001 has being considered by the examiner and made of record in the application file.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1 and 3-6** are rejected under 35 U.S.C. 102(e) as being anticipated by Madour (U.S. P.G.-Pub. No. 2003/0053431).

Regarding **claim 1**, Madour discloses a method for performing an intra-packet data service node (PDSN) hard handoff (handoff between the same PDSN; *Fig. 2, item 220*), comprising the steps of: (a) setting up a channel link passing through a target base

station controller (T-BSC), a source base station controller (S-BSC), a source packet control function (S-PCF) and a PDSN (A Target BSC (*item 225*), a source BSC (*item 210*), a source PCF (*item 215*), and PDSN (*item 220*), all interfaced or connected altogether; *Fig.2; Page 2, Paragraph 29*) by establishing a channel link between the S-BSC and the T-BSC via a mobile station center (MSC) in an active packet session mode (A target BS (base station) comprising a target BSC, a source BS comprising a source BSC, and both source and target BSC's connected to a MSC (mobile switching center) in an active packet data session mode; *Page 2, Paragraphs 27 and 29*); (b) performing the hard handoff between the S-BSC, the T-BSC and a mobile station (MS) (*Page 3, Paragraphs 33-34*); and (c) transmitting or receiving user packet data (*Page 2, Paragraph 29*) exchanged between the MS and the T-BSC (A connection between a terminal such as mobile telephone and a target base station which comprises a target base station; *Page 3, Paragraph 35*) through the established channel link to or from the PDSN in case the hard handoff is completed (As a result of the handoff process the terminal or mobile telephone is served by the target BS and ultimately by the PDSN; *Page 3, Paragraph 34*).

Regarding **claim 3**, and as applied to claim 1, Madour discloses the aforementioned method, wherein the step (a) includes the step of: (a1) transmitting a Handoff Required message from the S-BSC to the MSC (*Page 3, Paragraph 33*) and establishing the channel link between the S-BSC and the MSC (*Page 2, Paragraph 29; Fig. 1, connections A2/A1*).

Regarding **claim 4**, and as applied to claim 3, Madour discloses the aforementioned method wherein, in the step (a1), the channel link between the S-BSC and the MSC is established by including a circuit identification code (CIC) as an extender in the Handoff Required message (Including an identification code such as a Previous Access Network Identification Code (PANID); *Page 3, Paragraph 33*).

Regarding **claim 5**, and as applied to claim 1, Madour discloses the aforementioned method wherein the step (a) includes the step of: (a2) transmitting a Handoff Request message from the MSC to the T-BSC (*Page 3, Paragraph 33*) and establishing the channel link between the MSC and the T-BSC (*Page 2, Paragraph 29; Fig. 1, connections A2/A1*).

Regarding **claim 6**, and as applied to claim 5, Madour discloses the aforementioned method wherein in the step (a2), the channel link between the MSC and the T-BSC is set up by including a circuit identification code (CIC) as an extender in the Handoff Request message (Including an identification code such as a Packet Zone Identification Code PZID; *Page 3, Paragraph 33*).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Madour (U.S. P.G.-Pub. No. 2003/0053431) in view of Madour (U.S. P.G.-Pub. No. 2002/0021681).

Regarding **claim 2**, and as applied to claim 1, Madour (U.S. P.G.-Pub. No. 2003/0053431) discloses the aforementioned method further comprising the steps of: (d) establishing a channel link between the T-BSC, a target packet control function (T-PCF) and the PDSN in a dormant packet session mode (*Page 3, Paragraph 36*); (f) releasing the channel link established between the S-BSC and the MSC, which is set up in the step

(a) (*Page 3, Paragraph 36*), and releasing the channel link set up between the S-PCF and the PDSN (*Page 3, Paragraph 35*). Madour (U.S. P.G.-Pub. No. 2003/0053431) fails to clearly specify the step (e) releasing the channel link set up between the S-BSC and the S-PCF.

In the same field of endeavor, Madour (U.S. P.G.-Pub. No. 2002/0021681) discloses a method for improving handoff wherein the release of the resources that are no longer needed is initiated by sending an A9-Release-A8 message to the Serving or Source PCF to release the A8 connection, subsequently dismantling said connection, furthermore sending an A9-Release-A8 Complete message to the Serving or Source BSC (*Pages 2-3, Paragraph 25*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Madour (U.S. P.G.-Pub. No. 2003/0053431) method for performing handoff in a radio telecommunication system to release a connection between the PCF and the BSC as taught by Madour (U.S. P.G.-Pub. No. 2002/0021681) for the purpose of releasing connections that are no longer needed once the handoff transition is completed.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Morales et al. (U.S. P.G.-Pub. No. 2002/0067707), Method and Apparatus to Control Handoff Between Different Wireless Systems.

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- b. Julka et al. (U.S. P.G.-Pub. No. 2002/0193110), Mobility Management Entity for High Data Rate Wireless Communications Networks.
- c. Sayeedi et al. (U.S. P.G.-Pub. No. 2003/0031159), Apparatus and Method for Supplying Information Concerning Packet Data to a Base Station.
- d. Wang et al. (U.S. P.G.-Pub. No. 2002/0055364), Method and System for Using Common Channel for Data Communications.
- e. Madour (U.S. P.G.-Pub. No. 2002/0114293), Mobile IP Mobility Management at Dormant Hand-Over in CDMA IP Based Cellular Packet-Data Network.
- f. Chang (U.S. P.G.-Pub. No. 2001/0038615) Method for Providing Concurrent Service in a Mobile Communication System.

10. Any response to this Office Action should be **faxed to** (703) 872-9306 or **mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

**Hand-delivered** responses should be brought to

Crystal Park II

2021 Crystal Drive

Arlington, VA 22202

Sixth Floor (Receptionist)



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11. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.


12. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379, and fax number is (703) 746-9818. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

*Ismael Quiñones*

I.Q.

July 1<sup>st</sup>, 2004

  
RAFAEL PEREZ-GUTIERREZ  
PATENT EXAMINER  
7/9/04